

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Unicell Body Company Inc.

New York Manufacturing Extension Partnership

Unicell Body Company Benefits From Supply Chain Management

Client Profile:

Unicell Body Company, Inc., is a manufacturer of truck bodies that are sold into a wide variety of commercial market applications including building contractors, delivery services, food manufacturing/distribution, rental companies, utilities and municipalities. The Canadian-based company was founded in Toronto, Canada in 1945. Unicell Body established its presence in the United States in 1977 in a facility in Buffalo, New York, which currently employs 65 people. The company sells primarily through Ford, GM and most recently Daimler-Chrysler dealers, but also realizes substantial volume through fleet sales and leasing companies. Its units are generally sold throughout the northeastern United States, as well as significant export sales into Quebec, Canada.

Situation:

In recent years, Unicell Body Company has maintained steady growth and has successfully competed against much larger national manufacturers including Supreme, Morgan, Bay Bridge and Utilimaster. This has been achieved by effectively marketing its patented design, which is a single-piece, fiberglass unit. In addition, Unicell Body has consistently introduced new products (particularly the fuel-efficient aerodynamic models) that meet ever-changing market conditions. Unicell Body has also successfully met the demands of business growth and enhanced its competitive position through the implementation of Lean manufacturing techniques, particularly workplace organization, cellular flow, line balancing and point of use storage. These lean elements have substantially reduced both waste of movement and work in process. These activities have also enabled the company to realize an increase in capacity from four to six units per shift as well as a 15 percent improvement in productivity. In terms of customer response, lead time was reduced from several weeks to several days. By freeing up additional capacity, Unicell Body has been able to shift its product mix toward custom products, which allow for higher margins than standard vans.

Despite significant internal gains through the successful Lean manufacturing implementation, Unicell Body's senior staff recognized several issues relative to the effective management of its supply chain. Of particular concern were the cost of several materials, specifically gel coat, resin and fiberglass which were the key components of the truck body. Escalating cost of these materials was attributed to rising oil prices driven by increased market demand and natural disasters, particularly hurricanes. In addition, the company was also experiencing cost and availability issues on other major components including wood, steel and roll up doors. Furthermore, materials management personnel in both Buffalo and Toronto were almost totally consumed with day-to-day issues that allowed minimal time to address these critical strategic issues. Insyte Consulting, New York Manufacturing Extension Partnership's Western New York Regional Technology Development Center, a NIST MEP network affiliate, was subsequently engaged to support the development and implementation of an effective supply chain management (SCM) process with the objective of achieving a 10 percent material cost reduction.

Solution:

www.mep.nist.gov



MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

A joint project team was formed consisting of personnel from Unicell Body and Insyte Consulting. The Unicell Body participants were educated in the concepts of supply chain management, and subsequently each member was assigned specific roles and responsibilities along with related accountability. The first improvement step was to analyze the current processes in order to identify the root causes of most day-to-day problems. The activities were reorganized with the shop to provide more opportunities for the materials management staff to work on strategic issues. Controls were introduced over ordering, delivery and other short-term issues, which allowed for the development of a new materials plan intended for addressing longer-term issues. The new plan included best practices in supply management, execution of material usage and design, as well as improvement in customer and supplier communications. The plans and recommendations were coordinated between Buffalo and Toronto in order to realize cost reductions for 50 key items based on economies of scale. Each of the above actionable items was reviewed during weekly meetings over a four-week period. During this time Kaizen techniques were also introduced for the purpose of implementing changes and improving work place organization.

Several dramatic improvements were realized during the first phase of the SCM initiative. Within five months, material cost reductions of 5 percent were quickly realized with additional opportunities identified representing a further 5 percent. Expediting activities were reduced by 25 percent, which enabled the materials management staff to concentrate on material cost reduction and other strategic, progressive issues. These improvements were accomplished largely through the increased cooperation and teamwork between the two manufacturing facilities. Once the participants recognized the benefits of the changes, the inter-plant cooperation improved significantly. Most importantly, there is now good documentation and tracking systems in place for future SCM improvements. Anticipated plans include further material cost reductions, as well as addressing prioritized service issues with vendors, pursuing a second vendor for roll up doors and extending the SCM process through the company's distribution channels. Unicell Body recognizes the need for sustaining the improvements and fostering a spirit of continuous improvements over the long term.

Results:

- * Realized \$100,000 in cost savings.
- * Avoided \$50,000 in unnecessary investments.
- * Retained 3 jobs.
- * Reduced material costs by 5 percent.
- * Identified further reductions of 5 percent.
- * Reduced expediting activities by 25 percent.
- * Developed good documentation and tracking systems.

Testimonial:

"Insyte Consulting has given us an excellent start on better managing our supply chain. They have been particularly effective in the areas of fostering inter-plant cooperation, implementing a systematic materials cost reduction program and improving the personal effectiveness and morale of our key people in this area."

Roger Martin, President